## 97-84169-15 National Reseach Council (U.S.)

The scope and work of the Botanical Raw Products...

[Washington, D.C.]

[1917]

### COLUMBIA UNIVERSITY LIBRARIES PRESERVATION DIVISION

#### BIBLIOGRAPHIC MICROFORM TARGET

#### ORIGINAL MATERIAL AS FILMED - EXISTING BIBLIOGRAPHIC RECORD

| OCLC: 37287822<br>Entered: 19970714 | Rec stat:<br>Replaced: | n<br>19970714 | Used:<br>Ctrl: | 19970714<br>Lang: eng |
|-------------------------------------|------------------------|---------------|----------------|-----------------------|
| - Type: a ELvl: K                   |                        | Audn:         | MRec:          |                       |
|                                     |                        | Blog:         |                | ccij. ac-             |
| Cont.                               | GPub:                  | Fict: 0       | Dates: 1917    | <b>+</b>              |
| Desc: a Ills:                       | Fest: 0                | DtSt: s       | Dates: 1917    | '                     |
| DD1 DD                              | 1 4                    |               | a = i n #      |                       |
| _ , _, _, _, _, _,                  | a ve f vf a            | vg b vn a vi  | C v) p ··      |                       |
|                                     | 0 TO F TF 3            | AU D AH U AT  | a 'JP'         |                       |
| _ 4 007 h vb d vd                   | a ve f vf a            | vg b vn a vi  | D 4) D         |                       |
| _ 5 '049 PR1A ↔                     |                        | (II C ) wh    | Rotanical Raw  | Products              |
| _ 6 110 2 National                  | Research Counci        | I (0.5.). *D  | Bocanical man  |                       |
| Committee. + 7 245 14 The scope     | and work of the        | e Botanical R | aw Products C  | committee ▼h          |
| [microform] / vc Nationa            | 1 Research Coun        | cil. +        |                | 40477                 |
| [microform] / C Nation              | on, D.C.: *b N         | ational Acade | my of Science  | es, *C 1917] *        |
|                                     |                        |               |                |                       |
| as soo "Ponrinte                    | d from the Proc        | eedings of th | e National Ac  | cademy of             |
| Sciences, Vol. 3, pp. 73            | 31-733, December       | , 1917. #     |                |                       |
| Scrences, vor. 31 bb.               |                        |               |                |                       |

RESTRICTIONS ON USE: Reproductions may i

Reproductions may not be made without permission from Columbia University Libraries.

#### TECHNICAL MICROFORM DATA

| FILM SIZE: <u>35mm</u> | REDUCTION RATIO: _/Z.'/ | IMAGE PLACEMENT: IA IB | IIB |
|------------------------|-------------------------|------------------------|-----|
| DATE FILMED: _         | 8,27-97                 | INITIALS:              |     |
| TRACKING #:            | 26354                   |                        | ,   |

FILMED BY PRESERVATION RESOURCES, BETHLEHEM, PA.

EB 25 1918

NATIONAL RESEARCH COUNCIL

308

THE SCOPE AND WORK OF THE BOTANICAL RAW PRODUCTS COMMITTEE

Reprinted from the Proceedings of the National Academy of Sciences, Vol. 3, pp. 731-733, December, 1917

#### NATIONAL RESEARCH COUNCIL

#### THE SCOPE AND WORK OF THE BOTANICAL RAW PRODUCTS COMMITTEE

At the twenty-fourth meeting of the Executive Committee of the Council held on July 12, 1917, the appointment of a Botanical Raw Products Committee was approved. This committee has since been organized with Edward M. East, Chairman, and Oakes Ames, L. H. Dewey, H. M. Hall, Henry Kraemer, A. D. Little, George T. Moore, W. W. Stockberger and W. P. Wilson, members. It is designed to serve as a clearing house where manufacturers needing raw products of a botanical nature may obtain information regarding them. The scope of its work may be outlined somewhat as follows:

- The collection of agricultural, botanical and commercial data on all species and varieties of plants having an economic value (exclusive of food staples).
- 2. Dissemination of such information among importers and manufacturers.
- 3. Investigation of requirements of the trade for known raw materials.
- 4. The discovery of new geographic sources of plants necessary to the trade.
- 5. The development of plans for meeting the needs of industry by the cultivation of economic plants in the United States.
- The initiation of investigations calculated to discover the value of conventional equivalents and substitutes for raw products of a botanical nature.
- 7. The discovery and investigation of the value of new equivalents and
- 8. The investigation of the requirements of the trade for new raw materials.
- The suggestion of new species as possibly meeting trade requirements, and the initiation of the proper investigations as to whether or not they meet these requirements.

10. The suggestion of new uses for botanical raw products.

Owing to the magnitude of the work proposed, there being over 25,000 species and varieties of plants having an economic value (exclusive of agricultural and horticultural novelties), it would be some time before active work as a clearing house for manufacturers could begin were it not that at the commencement of its labors there was already available to the committee a large amount of data on special subjects gathered and catalogued at various research institutions. It is therefore already on a working basis, both in its advisory and its research capacity.

That there is great need for a work such as this hardly requires demonstration. Exclusive of foods, numerous botanical raw products are very important to our industries. There are gums and resins, rubbers, vegetable fats and oils, vegetable dues and tannins, fibres, cellulose, drugs and herbs, essential oils and perfumes, and possibly most important of all, forest products. A great number of facts have been discovered about many of these products, but in too many cases even the name of the species from which the raw material comes is uncertain, obscure or unknown. Very often a great industry buys its raw material from a broker or an importing house without knowledge of either the geographic or the specific source. When this source is cut off, as has frequently been the case during the past three years. and as possibly will be more frequent during the next few years, the manufacturer has been placed in an uncomfortable position. Curiously enough, such a predicament is many times brought about by the curtailment of a products used in such relatively small quantities that the fact that it is essential to the finished article is overlooked or forgotten during times of plenty.

The Botanical Raw Products Committee, if it gives the service expected of it, must answer questions concerning all such materials. To do this, data are required along five different lines: botanical, agricultural, industrial, commercial and bibliographical.

One should know the correct scientific name together with the scientific symonomy, the published descriptions, original sources and plates. He should have at hand the native names, for, though often confusing, they are frequently the sole clues to the identity of commercial specimens. No less important is the history, the morphology, the physiology and the geographical distribution both of the plants themselves and of their near relatives.

Pertinent agricultural facts are those regarding varieties, their types and origin; cultural requirements, including data on soils and fertilizers, climate, temperature, moisture, planting and cultivation; harvesting and storing; diseases and their treatment; and pests and their control.

Industrial data are still more complicated. One must know all of the economic uses of a plant, and oft-times these are varied as well as numerous. The products go under many aliases, both trade names and native names. These must all be listed. Various methods of preparation must be entered. Data on yields, grades and values, must be assembled. The raw products themselves must be identifiable, and methods of detection frequently must be worked out. And even here the work does not end. Equivalents, substitutes and adulterants must be described and tabled, and the uses for which they are fitted and for which they are unsatisfactory investigated. Many of these facts are obtainable only if commercial firms offer their hearty cooperation and support. They are not trade secrets but pertain to specialized industries and are not usually available in published form.

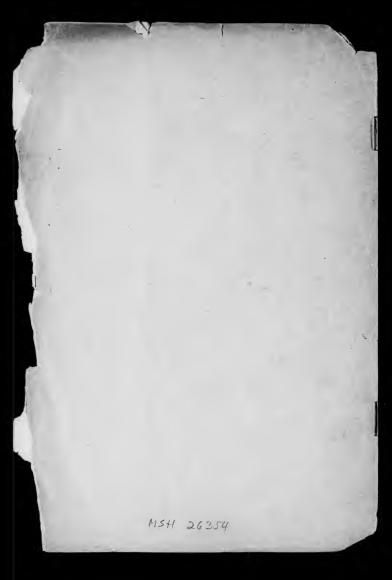
These agricultural, botanical and industrial data, if brought together in a systematic manner, will have a lasting value and will serve as a basis for

placing economic botany on the high plane of usefulness that industrial chemistry has held for many years. But they will not meet the practical requirements of economic life unless considered from the commercial viewpoint. They must be supplemented by all available statistics concerning the importation and exportation of each product, and the prices current through a term of years

Finally, there must be a reference library department. Information is of little use unless it is systematized in such a manner that it is readily available. Adequate cross reference catalogues containing citations of the best literature must therefore be kept up to date.

This, in a general way, is the work which the Botanical Raw Products Committee must do to be in a position to act as an industrial service bureau. This is the work which, though it must be continuous, though it meet reaches completion, is really preliminary to the main activities listed above. True service must come from actual contact with the technical problems of manufacturers and importers.

For the Committee, EDWARD M. EAST, Chairman.



# END OF TITLE